Course Syllabus

Code - Course Title	**BVA208 - Medical Data Mining**
Course Type	II. SEMESTER
Laboratory + Practice	2+0
ECTS	**2.0**
Language of Instruction	Türkçe
Course Type	Area Elective Courses
Course Instructor(s)	SALİHA ACAR

Mode of Delivery	Face to face
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	Basic Mathematical Knowledge
Courses Recomended	Basic Mathematical Knowledge
Recommended Resources	Faculty Recommendation
Work Placement	N/A
Aims of the Course	The aim of this course is to train individuals who can extract meaningful information from large and complex data produced in the field of health, analyze this information, and utilize data mining methods to solve health-related problems.

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Data Mining in Healthcare, and Fundamentals of Health Data Sources	
Week - 2		Data Preprocessing Techniques for Health Data	
Week - 3		Exploratory Data Analysis for Health Data	
Week - 4		Classification Algorithms in Health Data Mining	
Week - 5		Clustering Methods for Health Data Analysis	
Week - 6		Association Rule Mining in Healthcare	
Week - 7		Predictive Modeling for Disease Diagnosis	
Week - 8		Text Mining in Biomedical Literature	
Week - 9		Feature Selection and Dimensionality Reduction in Health Data	
Week - 10		Evaluation Metrics for Data Mining Models	
Week - 11		Ethical Considerations in Medical Data Mining	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 12		Regulatory Compliance in Health Data Analysis	
Week - 13		Case Studies in Medical Data Mining	
Week - 14		Medical Data Mining in the Industry	

Learning Outcomes

#	Learning Outcome
1	Understanding data mining concepts
2	Skills in data preprocessing
3	Recognizing healthcare data concepts
4	Ability to apply data mining techniques
5	Understanding healthcare applications

Sustainable Development Goals

No content has been provided.

Course Theme

✓ Data Science

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Multiple Choice Test ✓ Short-Answer Test ✓ True-False Test ✓ Fill-in-the-Blank Test